CLAIMS

1.   A method for authentication of a user by an
authenticating entity comprising the steps of:
        the authenticating entity sending a challenge to the
user;
        the user adding a spoiler to the challenge;
        the user encrypting the combined spoiler and
challenge using a private key of an asymmetric key pair;
        the user sending a response to the authenticating
entity in the form of the encrypted combined spoiler and
challenge.

2.   A method as claimed in claim 1, wherein the method
includes the authenticating entity decrypting the
encrypted combined spoiler and challenge using the public
key of the asymmetric key pair and determining if the
user has been authenticated.

3.   A method as claimed in claim 1, wherein the addition
of a spoiler to the challenge is carried out by applying
a spoiler function to the challenge.

4.   A method as claimed in claim 3, wherein the form of
the spoiler function is sent to the authenticating
entity.

5.   A method as claimed in claim 1, wherein the spoiler
is added to the challenge as a prefix or a suffix and the
authenticating entity extracts the challenge by counting

the number of bytes from the beginning or end of the
combined spoiler and challenge.

6.   A method as claimed in claim 1, wherein the method
5   includes the user obtaining a digest of the combined
spoiler and challenge before the step of encrypting.

7.   A method as claimed in claim 6, wherein the user
obtains the digest by applying a hash function to the
10   combined spoiler and challenge.

8.   A method as claimed in claim 6, wherein the user
sends details of the spoiler and the method of obtaining
the digest to the authenticating entity.

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9.   A method as claimed in claim 1, wherein the user
sends details of the algorithm used for encryption to the
authenticating entity.

20   10.   A method as claimed in claim 8, wherein the
authenticating entity obtains a digest of the combined
spoiler and the original challenge that the
authenticating entity sent to the user and compares the
digest to a digest obtained by decrypting the response
25   from the user.

11.   A method as claimed in claim 1, wherein the
challenge is a bit sequence.

12.   A method as claimed in claim 1, wherein the spoiler is an additional bit sequence.

13.   A system for authentication of a user comprising a first application and an authenticating second application,

    the authenticating second application having means for sending a challenge to the first application,

    the first application having means for adding a spoiler to the challenge and means for encrypting the combined spoiler and challenge with a private key of an asymmetric key pair, and

    means for sending the encrypted combined spoiler and challenge from the first application to the authenticating second application.

14.   A computer program product stored on a computer readable storage medium for authentication of a user by an authenticating entity, comprising computer readable program code means for performing the steps of:

    the authenticating entity sending a challenge to the user;

    the user adding a spoiler to the challenge;

    the user encrypting the combined spoiler and challenge using a private key of an asymmetric key pair;

    the user sending a response to the authenticating entity in the form of the encrypted combined spoiler and challenge.